

*281203*  
STIC-EIC1600/2900

From: SHOBHA KANTAMneni [shobha.kantamneni@uspto.gov]  
Sent: Monday, December 22, 2008 9:43 AM  
To: STIC-EIC1600/2900  
Subject: Search Request, Case/Application No : 10/719588

*SHOBHA*  
Requester: SHOBHA KANTAMneni (P/1617)

Art Unit: GROUP ART UNIT 1617

Employee Number:

Office Location: REM 4AS

Phone Number: (571)272-2930

Case/Application number: 10/719588

Priority Filing Date:

Format for Search Results: No selection

Meaning of unusual acronyms or initialisms:

Identify the novelty:

Additional comments:

Please, do structure search for compounds of formula (III), and formula (IV). Include closely related geminal-dialkyl substituted compounds.

Attachment: Yes (719588\_Claims, Whole Document.pdf)

*MJ*  
12/22/2008

=> d ibib abs hitstr 113 1-5

L13 ANSWER 1 OF 5 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:209520 HCPLUS [Full-text](#)  
 DOCUMENT NUMBER: 142:284790  
 TITLE: Emollient mixture for cosmetic formulations containing dialkyl carbonates and acyclic alkanes  
 INVENTOR(S): Issberner, Ulrich; Kawa, Rolf; Mitchell, Catherine; Ansmann, Achim; Jackwerth, Bettina  
 PATENT ASSIGNEE(S): Cognis Deutschland GmbH & Co. Kg, Germany  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1512392	A1	20050309	EP 2004-20127	20040825
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
DE 10341025	A1	20050331	DE 2003-10341025	20030903
US 20050079986	A1	20050414	US 2004-926629	20040826
JP 2005075833	A	20050324	JP 2004-255549	20040902

PRIORITY APPLN. INFO.: DE 2003-10341025 A 20030903

AB The invention concerns water-free compns. that are liquid at 20°C and normal pressure and that contain (a) 20-90 weight/weight% linear or branched dialkyl carbonates and (b) 2-95 weight/weight% C8-C40 acyclic alkanes. The compns. do not contain addnl. oils or waxes and are free of silicone oils. Selected ingredients are (a) di-n-octylcarbonate and (b) diethylidodecane, didecene or any isomeric mixture of the compds.

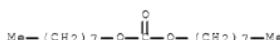
IT 1680-31-5, Diocetylcarbonate 24251-86-3,

5,8-Diethylidodecane

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (emollient mixture for cosmetic formulations containing  
 dialkyl carbonates and acyclic alkanes)

RN 1680-31-5 HCPLUS

CN Carbonic acid, diocetyl ester (CA INDEX NAME)



RN 24251-86-3 HCPLUS

CN Dodecane, 5,8-diethyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:800775 HCAPLUS Full-text  
 DOCUMENT NUMBER: 141:319525  
 TITLE: Emollient mixtures for use as petroleum  
 mineral oil replacements in cosmetics  
 INVENTOR(S): Bruening, Stefan; Ansman, Achim; Jackwerth,  
 Bettina; Dee, Gary  
 PATENT ASSIGNEE(S): Cognis Deutschland GmbH & Co. KG, Germany  
 SOURCE: Ger. Offen., 5 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10312352	A1	20040930	DE 2003-10312352	20030320
WO 2004082641	A1	20040930	WO 2004-EP2495	20040311
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1603516	A1	20051214	EP 2004-719386	20040311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
JP 2006520350	T	20060907	JP 2006-504634	20040311
US 20060280709	A1	20061214	US 2006-549953	20060803
PRIORITY APPLN. INFO.:			DE 2003-10312352	A 20030320
			WO 2004-EP2495	W 20040311

AB The invention concerns emollient mixts. for the replacement of petroleum mineral oil in cosmetics; the emollients contain esters of C8-C18 fatty acids with C3-C12 alcs., esters of adipinic acid and C3-C12 alcs. in combination with poly-alpha-olefins, while the amount of esters is 10-90 weight/weight% of the total amount of ester and polyalpha olefins. Thus and emollient contained (weight/weight%): Cetiol OC 50; Synfluid PAO 50.

IT 105-99-7, Dibutyl adipate 110-27-0, Isopropyl myristate 124-04-9D, Hexanedioic acid, esters with C3-C12 alcs. 142-91-6, Isopropyl palmitate 5425-77-6, 2-Hexyldecanol 3913-02-8, 2-Butyloctanol 5333-42-6, Eutanol G 17438-89-0, 1-Decene dimer 22047-49-0, 2-Ethylhexyl stearate 29806-73-3, 2-Ethylhexyl palmitate 52132-67-6, 1-Dodecene dimer 110225-60-8, Eutanol G 16 765923-35-1, Synfluid PAO 2cSt

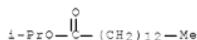
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (emollient mixts. for use as petroleum mineral oil  
 replacements in cosmetics)

RN 105-99-7 HCAPLUS

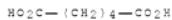
CN Hexanedioic acid, 1,6-dibutyl ester (CA INDEX NAME)



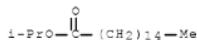
RN 110-27-0 HCAPLUS  
 CN Tetradecanoic acid, 1-methylethyl ester (CA INDEX NAME)



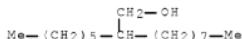
RN 124-04-9 HCAPLUS  
 CN Hexanedioic acid (CA INDEX NAME)



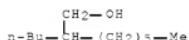
RN 142-91-6 HCAPLUS  
 CN Hexadecanoic acid, 1-methylethyl ester (CA INDEX NAME)



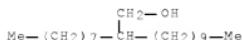
RN 2425-77-6 HCAPLUS  
 CN 1-Decanol, 2-hexyl- (CA INDEX NAME)



RN 3913-02-8 HCAPLUS  
 CN 1-Octanol, 2-butyl- (CA INDEX NAME)



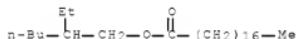
RN 5333-42-6 HCAPLUS  
 CN 1-Dodecanol, 2-octyl- (CA INDEX NAME)



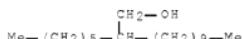
RN 17438-89-0 HCAPLUS

CN 1-Decene, dimer (CA INDEX NAME)

CM 1

CRN 872-05-9  
CMF C10 H20RN 22047-49-0 HCPLUS  
CN Octadecanoic acid, 2-ethylhexyl ester (CA INDEX NAME)RN 29806-73-3 HCPLUS  
CN Hexadecanoic acid, 2-ethylhexyl ester (CA INDEX NAME)RN 62132-67-6 HCPLUS  
CN 1-Dodecene, dimer (CA INDEX NAME)

CM 1

CRN 112-41-4  
CMF C12 H24RN 110225-00-8 HCPLUS  
CN 1-Dodecanol, 2-hexyl- (CA INDEX NAME)RN 765923-35-1 HCPLUS  
CN Synfluid PAO 2cSt (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L13 ANSWER 3 OF 5 HCPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2003:467310 HCPLUS Full-text

DOCUMENT NUMBER: 139:41466  
 TITLE: Cosmetic and pharmaceutical  
 emollients containing 2-methyl-1,3-propanediol  
 diesters  
 INVENTOR(S): Print, Danielia; Westfchelt, Alfred  
 PATENT ASSIGNEE(S): Cognis Deutschland G.M.b.H. & Co. K.-G., Germany  
 SOURCE: Ger. Offen., 12 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10160682	A1	20030618	DE 2001-10160682	20011211
WO 2003053373	A2	20030703	WO 2002-EP13695	20021204
WO 2003053373	A3	20040115		
W: AU, BR, CA, CN, JP, KR, MX, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
AU 2002364280	A1	20030709	AU 2002-364280	20021204
EP 1453473	A2	20040908	EP 2002-799052	20021204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005516019	T	20050602	JP 2003-554133	20021204
US 20050019353	A1	20050127	US 2004-498599	20040610
PRIORITY APPLN. INFO.:			DE 2001-10160682	A 20011211
			WO 2002-EP13695	W 20021204

OTHER SOURCE(S): MARPAT 139:41466  
 AB The invention concerns emollients for cosmetic and pharmaceutical applications that contain 2-methyl-1,3-propanediol diesters, especially 2-Methyl-1,3-Propanediol dilauryl ester. 2-Methyl-1,3-Propanediol is esterified with the carboxylic acid in the presence of tin oxyde catalyst, the product is filtered and purified by distillation. Emollient compns. contain (weight/weight%): 2-methyl-1,3-propanediol diesters 0.1-50; surfactants, emulsifiers, coemulsifiers 0.1-20; oily bodies 0.1-40; water 0-98.  
 IT 7732-18-5, Water, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (cosmetic and pharmaceutical emollients containing 2-Me-1,3-propanediol diesters)  
 RN 7732-18-5 HCPLUS  
 CN Water (CA INDEX NAME)

H<sub>2</sub>O

IT 1332-29-2, Tin oxide  
 RL: CAT (Catalyst use); USES (Uses)  
 (cosmetic and pharmaceutical emollients containing 2-Me-1,3-propanediol diesters)  
 RN 1332-29-2 HCPLUS  
 CN Tin oxide (CA INDEX NAME)

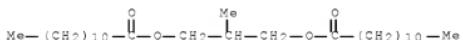
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 549730-50-5P  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cosmetic and pharmaceutical emollients containing  
2-Me-1,3-propanediol diesters)

RN 540730-50-5 HCPLUS

CN Dodecanoic acid, 2-methyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)



IT 2163-42-0D, 2-Methyl-1,3-Propanediol, diesters

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(cosmetic and pharmaceutical emollients containing  
2-Me-1,3-propanediol diesters)

RN 2163-42-0 HCPLUS

CN 1,3-Propanediol, 2-methyl- (CA INDEX NAME)



IT 143-07-7, Lauric acid, reactions 2163-42-0,

2-Methyl-1,3-Propanediol

RL: RCT (Reactant); RACT (Reactant or reagent)

(cosmetic and pharmaceutical emollients containing  
2-Me-1,3-propanediol diesters)

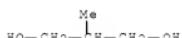
RN 143-07-7 HCPLUS

CN Dodecanoic acid (CA INDEX NAME)



RN 2163-42-0 HCPLUS

CN 1,3-Propanediol, 2-methyl- (CA INDEX NAME)



L13 ANSWER 4 OF 5 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:467309 HCPLUS [Full-text](#)

DOCUMENT NUMBER: 139:41465

TITLE: Cosmetic and pharmaceutical  
emollients containing 2-methyl-1,3-propanediol  
monoesters

INVENTOR(S): Prinz, Daniela; Westfachtel, Alfred  
; Seipel, Werner

PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H. & Co. K.-G., Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10160681	A1	20030618	DE 2001-10160681	20011211
WO 2003053907	A1	20030703	WO 2002-EP13694	20021204
W: AU, BR, CA, CN, JP, KR, MX, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
AU 2002358594	A1	20030709	AU 2002-358594	20021204
EP 1472211	A1	20041103	EP 2002-792879	20021204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, CY, TR, BG, CZ, EE, SK				
JP 2005513121	T	20050512	JP 2003-554624	20021204
US 20050089497	A1	20050428	US 2004-498664	20040610
PRIORITY APPLN. INFO.:			DE 2001-10160681	A 20011211
			WO 2002-EP13694	W 20021204

OTHER SOURCE(S): MARPAT 139:41465

AB The invention concerns emollients for cosmetic and pharmaceutical applications that contain 2-methyl-1,3-propanediol monoesters, especially 2-Methyl-1,3-Propanediol lauryl monoester. 2-Methyl-1,3-Propanediol is esterified with the carboxylic acid in the presence of tin oxide catalyst, the product is filtered and purified by distillation. Emollient compns. contain (weight/weight%): 2-methyl-1,3-propanediol monoesters 0.1-50; surfactants, emulsifiers, coemulsifiers 0.1-20; oily bodies 0.1-40; water 0-98.

IT 1332-29-2, Tin oxide 7732-18-5, Water, uses

RL: CAT (Catalyst use); USES (Uses)  
 (cosmetic and pharmaceutical emollients containing  
 2-Me-1,3-propanediol monoesters)

RN 1332-29-2 HCPLUS

CN Tin oxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 7732-18-5 HCPLUS

CN Water (CA INDEX NAME)

H<sub>2</sub>O

IT 540731-01-9P

RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (cosmetic and pharmaceutical emollients containing  
 2-Me-1,3-propanediol monoesters)

RN 540731-01-9 HCPLUS

CN Dodecanoic acid, 3-hydroxy-2-methylpropyl ester (CA INDEX NAME)



IT 2163-42-0D, 2-Methyl-1,3-Propanediol, diesters

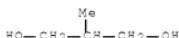
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

## USES (Uses)

(cosmetic and pharmaceutical emollients containing  
2-Me-1,3-propanediol monoesters)

RN 2163-42-0 HCPLUS

CN 1,3-Propanediol, 2-methyl- (CA INDEX NAME)



IT 143-07-7, Lauric acid, reactions 2163-42-0,

2-Methyl-1,3-Propanediol

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cosmetic and pharmaceutical emollients containing  
2-Me-1,3-propanediol monoesters)

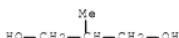
RN 143-07-7 HCPLUS

CN Dodecanoic acid (CA INDEX NAME)



RN 2163-42-0 HCPLUS

CN 1,3-Propanediol, 2-methyl- (CA INDEX NAME)



L13 ANSWER 5 OF 5 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:686912 HCPLUS Full-text

DOCUMENT NUMBER: 115:286912

ORIGINAL REFERENCE NO.: 115:48597a, 48600a

TITLE: Cosmetic water-in-oil emulsions. How to  
formulate elegant skin care products

AUTHOR(S): Ansmann, Achim; Kawa, Rolf

CORPORATE SOURCE: Henkel K.-G.a.A., Duesseldorf, W-4000/1, Germany

SOURCE: Seifen, Oele, Fette, Wachse (1991), 117(10), 369-71

CODEN: SOFWAF; ISSN: 0173-5500

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The influence of emollients and novel water-in-oil (w/o) emulsifiers on the viscosities and stabilities of w/o emulsions for cosmetic creams and lotions was investigated. For the creams, viscosity correlated with the viscosity and mol. masses of the emollients, yet surprisingly stability decreased with increasing viscosity; a consequence of an unfavorable ratio of the mol. mass of the emollient (e.g. Myritol 318, Cetiol J600) to the emulsifiers (Monomuls 90-018, Lameform TGI) employed. The addnl. deployment of Dehymuls FCE (dicocyl pentaerythrityl distearyl citrate as a high-mol.-weight coemulsifier, however, resulted in improved stability. For lotions employing Dehymuls HRE 7 (PEG 7-hydrogenated castor oil) as emulsifier, viscosity again correlated with the mol. weight of the emollient, yet stability was only correlated with emollient polarity; destabilization occurred if the lipophilic part of the

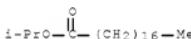
emulsifier was unable to aggregate in its appropriate configuration. Emulsions or mixts. thereof with medium polarity (e.g. Cetiol LC) gave w/o lotions with excellent stability.

IT 112-10-7, Emerest 2310 142-91-6 5333-42-6,  
Eutanol G 17673-56-2, Cetiol J 600 22847-49-0, Cetiol  
868 23805-73-3, Cegesoft C 24 24316-64-9, Cetiol A  
52623-82-2, Cetiol LC 68171-38-0, Emerest 2384

137802-13-2, Cetiol SN  
RL: BIOL (Biological study)  
(cosmetic emollient, water-in-oil emulsion-based  
creams and lotions containing, viscosity and stability of, mol. weight and  
polarity in relation to)

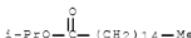
BN 112-10-7 HCAPLUS

CN Octadecanoic acid, 1-methylethyl ester (CA INDEX NAME)



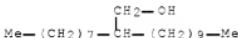
BN 142-91-6 HCAPLUS

CN Hexadecanoic acid, 1-methylethyl ester (CA INDEX NAME)



RN 5333-42-6 HCAPLUS

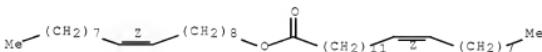
CN 1-Dodecanol, 2-octyl- (CA INDEX NAME)



RN 17673-56-2 HCAPLUS

CN 13-Docosenoic acid, (9Z)-9-octadecen-1-yl ester, (13Z)- (CA INDEX NAME)

Double bond geometry as shown.



BN 22047-49-0 HCAPLUS

CN Octadecanoic acid, 2-ethylhexyl ester (CA INDEX NAME)

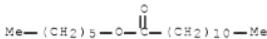


10/719,588

RN 29806-73-3 HCPLUS  
CN Hexadecanoic acid, 2-ethylhexyl ester (CA INDEX NAME)



RN 34316-64-8 HCPLUS  
CN Dodecanoic acid, hexyl ester (CA INDEX NAME)



RN 52623-82-2 HCPLUS  
CN Cetiol LC (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
RN 68171-38-0 HCPLUS  
CN Isooctadecanoic acid, monoester with 1,2-propanediol (CA INDEX NAME)

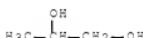
CM 1

CRN 30399-84-9  
CMF C18 H36 O2  
CCI IDS



CM 2

CRN 57-55-6  
CMF C3 H8 O2



RN 137802-13-2 HCPLUS  
CN Cetiol SN (CA INDEX NAME)

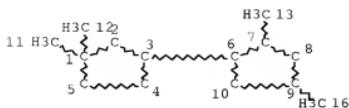
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
IT 137802-27-8, Dehymuls FCE  
RL: BIOL (Biological study)  
(cosmetic water-in-oil emulsion-based creams stabilization  
with, emollient mol. weight in relation to)  
RN 137802-27-8 HCPLUS  
CN Dehymuls FCE (9CI) (CA INDEX NAME)

10/719,588

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

## RESULTS FROM REGISTRY AND CAPLUS

=> d que stat 127  
L17 STR



## NODE ATTRIBUTES:

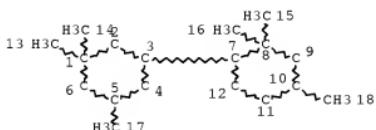
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 14

## STEREO ATTRIBUTES: NONE

L19 4 SEA FILE=REGISTRY SSS FUL L17  
L23 STR



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 18

## STEREO ATTRIBUTES: NONE

L25 7 SEA FILE=REGISTRY SSS FUL L23  
L26 11 SEA FILE=REGISTRY ABB=ON L19 OR L25  
L27 6 SEA FILE=HCAPLUS ABB=ON L26

=> d ibib abs hitstr 127 1-6

L27 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2006:1005999 HCAPLUS Full-text

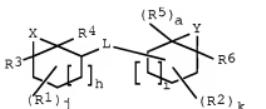
DOCUMENT NUMBER: 145:377978

TITLE: Active ray-curable composition having good storage  
stability and sensitivity, polymerization method,  
active ray-curable ink, image-forming method and ink  
jet recorder

INVENTOR(S): Okubo, Kimihiko; Miura, Norio; Kurata, Takeshi

PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic, Inc., Japan  
 SOURCE: PCT Int. Appl., 114pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006100978	A1	20060928	WO 2006-JP305110	20060315
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			JP 2005-79198	A 20050318
OTHER SOURCE(S):		MARPAT 145:377978		
GI				



AB The composition can give a cured film having sufficiently high hardness both before and after long-term storage in various environments, particularly in highly humid atmospheric. The active ray-curable composition contains a compound represented by the formula I (X, Y = O, S; L = direct bond or linking group; R3, R4, R5, R6 = H, alkyl; R1, R2 = substituent group; h, i = 0, 1 or 2; j, k = 0-9; a = 0, 1; when a = 0 then L connects to C atom substituted by R5). The composition is useful for ink-jet ink with good printability and storage stability. Thus, stirring 10 g di(5,5-dimethyl-2,3-epoxycyclohexane) with 1 g trifluoromethanesulfonic acid in 20 mL dichloroethane while heating at reflux under N for 30 min, adding 2 g triethylamine to stop the reaction, precipitating the reaction product with 20 mL MeOH and isolating gave a radiation-curable resin.

IT 910796-01-9P 910796-20-2P 910796-33-7P

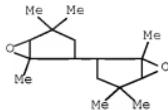
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of highly sensitive and storage-stable cyclic epoxy resins for radiation-curable ink-jet inks with good printability)

RN 910796-01-9 HCPLUS

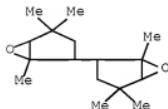
CN 2,2'-Bi-6-oxabicyclo[3.1.0]hexane, 1,1',4,4,4',4'-hexamethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

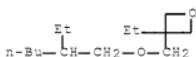
CRN 910796-00-8  
CME C16 H26 O2

RN 910796-20-2 HCPLUS  
 CN 2,2'-Bi-6-oxabicyclo[3.1.0]hexane, 1,1',4,4,4',4'-hexamethyl-, polymer with 3-ethyl-3-[(2-ethylhexyl)oxy]methylloxetane (9CI) (CA INDEX NAME)

CM 1

CRN 910796-00-8  
CME C16 H26 O2

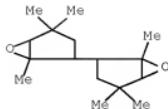
CM 2

CRN 298695-60-0  
CME C14 H28 O2

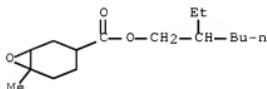
RN 910796-33-7 HCPLUS  
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-, 2-ethylhexyl ester, polymer with 1,1',4,4,4',4'-hexamethyl-2,2'-bi-6-oxabicyclo[3.1.0]hexane and 3,3'-[oxybis(methylene)]bis[3-ethyloxetane] (9CI) (CA INDEX NAME)

CM 1

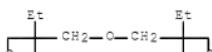
CRN 910796-00-8  
CME C16 H26 O2



CM 2

CRN 865364-47-2  
CMF C16 H28 O3

CM 3

CRN 18934-00-4  
CMF C12 H22 O3

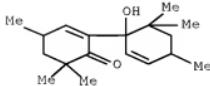
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:721217 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 134:17609  
 TITLE: A concise preparation of yuehchukene and its analogues  
 AUTHOR(S): Ishikura, Minoru; Imaizumi, Katsuaki; Katagiri, Nobuya  
 CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Health Sciences  
 University of Hokkaido, Hokkaido, 061-0293, Japan  
 SOURCE: Heterocycles (2000), 53(10), 2201-2220  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PUBLISHER: Japan Institute of Heterocyclic Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 134:17609  
 AB The palladium catalyzed carbonylative cross-coupling reaction of indolylborates with vinyl triflates afforded indol-2-yl ketones, which were subsequently converted to hexahydroindeno[2,1-b]indoles with the aid of an acid. This protocol was well adapted for the total synthesis of yuehchukene.  
 IT 309718-46-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (concise preparation of yuechukene and its analogs)

RN 309718-46-5 HCPLUS

CN 2-Cyclohexen-1-one, 2-(1-hydroxy-4,6,6-trimethyl-2-cyclohexen-1-yl)-4,6,6-trimethyl- (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 6 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:16961 HCPLUS Full-text  
 DOCUMENT NUMBER: 84:16961  
 ORIGINAL REFERENCE NO.: 84:2791a,2794a  
 TITLE: Aldol condensates  
 INVENTOR(S): Koester, Roland; Pourzal, Ali-Akbar  
 PATENT ASSIGNEE(S): Studiengesellschaft Kohle m.b.H., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 25 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2417357	A1	19751016	DE 1974-2417357	19740409
DE 2417357	B2	19760415		
DE 2417357	C3	19761209		
JP 50131915	A	19751018	JP 1974-52761	19740511
CA 1026319	A1	19780214	CA 1974-214407	19741122
PRIORITY APPLN. INFO.:			DE 1974-2417357	A 19740409

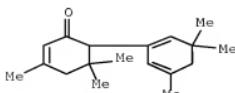
AB Aldol condensations between carbonyl compound components A and B (A = B, A ≠ B) carried out in the presence of R2BOCOR1 (R = Et, Pr; R1 = Me, Et, Ph, etc.) gave 63-98% of dimeric condensation products having ≥95% purity. Thus, EtCOPh reacted in the presence of Et2BOCOCMe3 to give 97% dimeric condensation product of 98% purity.

IT 57558-61-9P

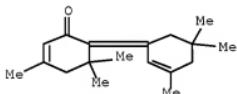
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 57558-61-9 HCPLUS

CN 2-Cyclohexen-1-one, 3,5,5-trimethyl-6-(3,3,5-trimethyl-1,5-cyclohexadien-1-yl)- (CA INDEX NAME)



L27 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1970:509343 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 73:109343  
 ORIGINAL REFERENCE NO.: 73:17795a,17798a  
 TITLE: Unusually stable salt from isophorone and hydrogen bromide  
 AUTHOR(S): Marx, John N.  
 CORPORATE SOURCE: Dep. of Chem., Texas Tech. Univ., Lubbock, TX, USA  
 SOURCE: Tetrahedron Letters (1970), (40), 3517-20  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB I is obtained when HBr is passed into neat isophorone, and addnl. HBr gives II. I is stable at room temperature in the absence of moisture and light. I is heated in a sealed tube at 70° to give the dimer, III.  
 IT 29770-82-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 29770-82-9 HCAPLUS  
 CN 2-Cyclohexen-1-one, 3,5,5-trimethyl-6-(3,5,5-trimethyl-2-cyclohexen-1-ylidene)- (CA INDEX NAME)



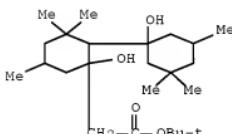
L27 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1967:37579 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 66:37579  
 ORIGINAL REFERENCE NO.: 66:7127a,7130a  
 TITLE: Condensations of the chloromagnesium derivative of tert-butyl acetate with ketones in ether. III.  
 Synthesis of  $\beta$ -hydroxylated and  
 $\beta,\delta$ -dihydroxylated derivatives in the  
 cyclo-alkane and aromatic series  
 AUTHOR(S): Maroni-Barnaud, Yvette; Gilard, Guy; Montalla, Andre;  
 Perry, Marcel; Dubois, Jacques E.  
 CORPORATE SOURCE: Lab. Chim. Org. Phys., Paris, Fr.  
 SOURCE: Bulletin de la Societe Chimique de France (1966),  
 (10), 3243-9  
 CODEN: BSCFAS; ISSN: 0037-8968  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 AB cf. CA 64, 19471e. The chloromagnesium derivative of tert-BuOAc (I) was prepared in situ by mixing 2.25-2.5 moles of iso-PrMgCl with 1 mole I in Et<sub>2</sub>O. Addition of 0.5 equivs. (ketone to the mixture and refluxing 2 hrs. gives a  $\beta$ -hydroxy ester >C(OH)CH<sub>2</sub>CO<sub>2</sub>Bu-tert (II). The following II were prepared (ketone used, % yield of II, and b.p. or m.p. of II given): cyclopentanone (III), 72, b<sub>1</sub> 71-2°; cyclohexanone (IV), 70, b<sub>1</sub> 82-3°; 3,3,5-

trimethylcyclohexanone (V), 75, b1 93-4°; 4-tert-butylcyclohexane (VI), 45, m. 57°; methone, 68, b1 113-14°; acetophenone (VII), 67, m. 34°; p-methylacetophenone, 66, m. 39°; p-isopropylacetophenone (VIII), 36, b1 121-22°; p-chloroacetophenone (IX), 76, m. 45°; p-methoxyacetophenone (X), 62, m. 34°; propiophenone (XI), 65, b1 108-9°; isobutyrophenone (XII), 66, m. 40°; fluorenone, 60, m. 79°. II in dioxane were hydrolyzed with concentrated HCl to the corresponding acid. Thus were prepared (ketone used, % yield acid, and m.p. acid given): III, 75, 77°; IV, 61, 65°; V 80, 117°; VI, 74, 151°; IX, 45, 112°; XI, 45, 121°; XII, 51, 117°; butyrophenone (XIII), 48, 122°. If the reaction is carried out in one step by refluxing a mixture of ketone, iso-PrMgCl, and I in Et2O, the principal product is  $\beta$ ,  $\delta$ -dihydroxy ester (XIV). A mechanism is suggested. The following XIV were prepared (ketones used, % yield of XIV, and m.p. given): III, 50, 95°; IV, 62, 113°; V 4, 121°; VII, 50, 163°; VIII, 2, 172°; X, 5, 146°; XII, 50, 126°; XIII, 25, 121°.

IT 13278-31-4F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 13278-31-4 HCPLUS

CN [1,1'-Bicyclohexyl]-2-acetic acid,  
1',2-dihydroxy-3',3',4,5',6,6-hexamethyl-, 1,1-dimethylethyl ester (CA  
INDEX NAME)

L27 ANSWER 6 OF 6 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1947:4829 HCPLUS

DOCUMENT NUMBER: 41:4829

ORIGINAL REFERENCE NO.: 41:991h-i,992a-b

TITLE: Ketols from isophorones and their homologs

INVENTOR(S): Ballard, Seaver A.; Haury, Vernon E.

PATENT ASSIGNEE(S): Shell Development Co.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

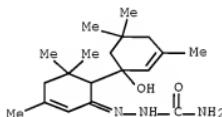
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2406652	-----	19460827	US 1941-390744	19410428

GI For diagram(s), see printed CA Issue.

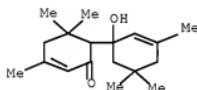
AB The preparation of crystalline diisophorone (I), isomeric with the diisophorone prepared by Ruzicka (C.A. 19, 514) and found to be unfit for insecticidal compns., by the condensation of isophorone (II) in the presence of an alkali metal hydroxide catalyst is described. Thus from a mixture of II 4 and 60% aqueous NaOH 1 part, heated at 145° 1.5 hrs., with stirring, in a Ni kettle, the supernatant liquid cooled, decanted, and distilled at 1-2 mm., was obtained I, colorless, m. 83.5-4.5° (from EtOH); semicarbazone m. 205-8°. The converted II (about 61%) consisted by weight of 83.5% diisophorone, 10.5%

higher products, and 6% H<sub>2</sub>O. NaOEt and solid NaOH can also be used as condensing agents. It is a useful insecticide, bactericide, fungicide, plasticizer, and synthetic intermediate.

IT 954726-52-6P, 2-Cyclohexen-1-one,  
 6-(1-hydroxy-3,5,5-trimethyl-2-cyclohexen-1-yl)-3,5,5-trimethyl-,  
 semicarbazone 854726-54-8P, 2-Cyclohexen-1-one,  
 6-(1-hydroxy-3,5,5-trimethyl-2-cyclohexen-1-yl)-3,5,5-trimethyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 854726-52-6 HCPLUS  
 CN Hydrazinecarboxamide, 2-[6-(1-hydroxy-3,5,5-trimethyl-2-cyclohexen-1-yl)-  
 3,5,5-trimethyl-2-cyclohexen-1-ylidene]- (CA INDEX NAME)



RN 854726-54-8 HCPLUS  
 CN 2-Cyclohexen-1-one, 6-(1-hydroxy-3,5,5-trimethyl-2-cyclohexen-1-yl)-3,5,5-  
 trimethyl- (CA INDEX NAME)



## SEARCH HISTORY

=&gt; d his ful

(FILE 'HOME' ENTERED AT 13:13:18 ON 22 DEC 2008)

FILE 'HCAPLUS' ENTERED AT 13:13:28 ON 22 DEC 2008

E ANSMANN ACHIM/AU

L1 188 SEA ABB=ON ("ANSMANN A"/AU OR "ANSMANN ACHIM"/AU OR "ANSMANN ACHIM DR"/AU OR "ANSMANN ACHIN"/AU)  
 E BOTH SABINE/AU  
 L2 31 SEA ABB=ON ("BOTH S"/AU OR "BOTH SABINE"/AU)  
 E PRINZDANIEL/AU  
 E PRINZ DANIELA/AU  
 L3 39 SEA ABB=ON ("PRINZ D"/AU OR "PRINZ D K"/AU OR "PRINZ DANIELA"/AU)  
 E SCHOEFFLER NICOLE/AU  
 L4 1 SEA ABB=ON "SCHOEFFLER NICOLE"/AU  
 E WESTFECHTEL ALFRED/AU  
 L5 105 SEA ABB=ON ("WESTFECHTEL A"/AU OR "WESTFECHTEL ALFRED"/AU)  
 L6 0 SEA ABB=ON L1 AND L2 AND L3 AND L4 AND L5  
 L7 350 SEA ABB=ON L1 OR L2 OR L3 OR L4 OR L5  
 L8 6 SEA ABB=ON L7 AND ?EMOLlient?  
 L9 6 SEA ABB=ON L8 AND ?COSMETIC?  
 L10 0 SEA ABB=ON L9 AND ?GEMINAL?  
 SELECT RN L9 1-6

FILE 'REGISTRY' ENTERED AT 13:17:12 ON 22 DEC 2008

L11 28 SEA ABB=ON (2163-42-0/BI OR 1332-29-2/BI OR 142-91-6/BI OR  
 143-07-7/BI OR 22047-49-0/BI OR 29806-73-3/BI OR 5333-42-6/BI  
 OR 7732-18-5/BI OR 105-99-7/BI OR 110-27-0/BI OR 110225-00-8/BI  
 OR 112-10-7/BI OR 124-04-9/BI OR 137802-13-2/BI OR 137802-27-8/BI  
 /BI OR 1680-31-5/BI OR 17438-89-0/BI OR 17673-56-2/BI OR  
 2425-77-6/BI OR 24251-86-3/BI OR 34316-64-8/BI OR 3913-02-8/BI  
 OR 52623-82-2/BI OR 540730-50-5/BI OR 540731-01-9/BI OR  
 62132-67-6/BI OR 68171-38-0/BI OR 765923-35-1/BI)  
 L12 0 SEA ABB=ON L9 AND L11

FILE 'HCAPLUS' ENTERED AT 13:17:42 ON 22 DEC 2008

L13 5 SEA ABB=ON L9 AND L11

FILE 'REGISTRY' ENTERED AT 13:18:58 ON 22 DEC 2008

L14 STR  
 L15 0 SEA SSS SAM L14  
 L16 0 SEA SSS FUL L14  
 L17 STR L14  
 L18 1 SEA SSS SAM L17  
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 L22 0 SEA SSS FUL L20  
 L23 STR  
 L24 1 SEA SSS SAM L23  
 L25 7 SEA SSS FUL L23  
 L26 11 SEA ABB=ON L19 OR L25

FILE 'HCAPLUS' ENTERED AT 13:24:14 ON 22 DEC 2008

L27 6 SEA ABB=ON L26

FILE HOME

FILE HCPLUS

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FILE COVERS 1907 - 22 Dec 2008 VOL 149 ISS 26

FILE LAST UPDATED: 21 Dec 2008 (20081221/ED)

HCplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

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STRUCTURE FILE UPDATES: 21 DEC 2008 HIGHEST RN 1088138-51-5

DICTIONARY FILE UPDATES: 21 DEC 2008 HIGHEST RN 1088138-51-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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<http://www.cas.org/support/stndoc/properties.html>